THE MINERAL INDUSTRY OF

SWITZERLAND

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The reserves of the small deposits of metalliferous ores that existed in Switzerland have been mostly depleted, and metal mining has ceased. Any new metal mining activities are being discouraged for environmental reasons. In 2001, mineral production was limited to mainly industrial mineral commodities required for construction; these included cement, clays, gravel, gypsum, lime, and sand (table 1). The mineral industry is largely controlled by the Government and is owned either privately or by regional governments (table 2). The 26 regional (cantons), or communal, governments grant mining or processing licenses and directly operate electrical generating facilities, gas utilities, local transportation facilities, and water resources

Metal processing was confined to the production of primary and secondary aluminum, secondary lead, and steel. All metal production in Switzerland was from either imported raw materials or scrap. Switzerland relied on imports for many mineral commodities because of self-imposed environmental restrictions and lack of natural resources. Concerns about environmental pollution reportedly caused the adoption of a policy to curtail gradually or perhaps even cease smelting activities.

Alusuisse Sierre AG invested $14 million in a new strip treatment facility for auto body aluminum sheet. When Alcan and algroup merged in October 2000, Alusuisse became part of the Alcan Group of companies. The new factory doubled the production capacity of automotive sheet at Sierre. In 2001, rolled products output was about 90,000 metric tons (t), of which about 40% was supplied to the automotive market; the remainder goes into machinery and other industrial uses. In addition, Alusuisse produced 30,000 t of extrusions and had two of the largest presses in Europe capable of extruding shapes up to 700 millimeters in circumference (Cundy, 2001).

A secondary lead smelter produced antimonial and calcium lead and a small amount of soft solder in bars from recycled batteries. The steel industry in Switzerland was characterized by a relatively small domestic market and a high degree of specialization (table 2).

Switzerland, which is a large diamond center, was actively involved in cutting and polishing diamonds. The country played a big role in international trade activities, although it has no diamond mines and the main diamond centers are in Antwerp, Belgium, London, United Kingdom, and Tel Aviv, Israel.

For more-extensive coverage of the mineral industry of Switzerland, see the 2000 Minerals Yearbook, International Review of Europe and Central Eurasia, Volume III.

Reference Cited

Cundy, Christopher, 2001, Advanced automotive sheet production for Alcan in Switzerland: Metal Bulletin Monthly, no. 364, April, p. 26.

TABLE 1
SWITZERLAND: ESTIMATED PRODUCTION OF MINERAL COMMODITIES 1/ 2/

(Thousand metric tons unless otherwise specified)

Commodity 3/		1997	1998	1999	2000	2001
METALS						
Aluminum:						
Primary	metric tons	27,339 4/	32,062 4/	34,439 4/	35,539 r/ 4/	36,000
Secondary	do.	6,000	6,000	15,000	15,000	6,000
Iron and steel:						
Pig iron		100	100	100	100	100
Steel, crude		1,047 r/ 4/	1,018 r/ 4/	1,037 r/ 4/	1,140 r/	1,100
Semimanufactures, rolled products		700	700	700	700	700
Lead, refined, secondary	metric tons	6,000	7,600	9,200 r/ 4/	10,100 r/ 4/	9,800
INDUSTRIAL MINERALS						
Cement, hydraulic		3,568 4/	3,600	3,600	3,600	3,600
Gypsum		300	300	300	300	300
Lime		35	35	30	30	30
Nitrogen, N content of ammonia		32	31	32	33 r/ 4/	31
Salt		300	300	300	300	300
Sulfur from petroleum refining	metric tons	5,000	4,000	3,000	3,000 r/	3,000
MINERAL FUELS AND RELATED MATERIALS						
Petroleum refinery products:						
Liquefied petroleum gas	thousand 42-gallon barrels	2,000	2,000	2,000	2,000	2,000
Gasoline	do.	9,000	9,000	9,000	9,000	9,000
Jet fuel	do.	2,000	2,000	2,000	2,000	2,000
Distillate fuel oil	do.	9,500	9,500	9,500	9,500	9,500
Residual fuel oil	do.	5,500	5,500	5,500	5,500	5,500
Bitumen	do.	800	800	800	800	800
Refinery fuel and losses	do.	2,000	2,000	2,000	2,000	2,000
Total 5/	do.	30,800	30,800	30,800	30,800	30,800

r/ Revised.
1/ Table includes data available through February 2002.
2/ Estimated data are rounded to no more than three significant digits; may not add to totals shown.
3/ In addition to the commodities listed, a variety of crude construction materials (common clay, sand and gravel, and stone) were produced, but output was not reported, and available general information was inadequate to make reliable estimates of output level.
4/ Reported figure.
5/ Total of listed products only.

TABLE 2
SWITZERLAND: STRUCTURE OF THE MINERAL INDUSTRY IN 2001

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Aluminum		Alusuisse Sierre AG (Alcan Group, 100%)	Smelter at Stag, plant at Sierre	168
Cement		Bundr Cementwerke AG (Holderbank Management and Consulting Ltd., 100%)	Plant at Untervaz	700
Do.		Cementfabrik Holderbank AG	Plant at Rekingen	700
Lead, secondary		Metallum AG	Smelter at Pratteln	13
Refinery, petroleum	barrels per day	Reffinerie du Sud-Ouest SA (Compagnie Francaise des Petroles, 49%; British Petroleum, 49%)	Refinery at Collombey	40,000
Do.	do.	Reffinerie de Cressier SA (Petroplus International NV, 100%)	Refinery at Cressier	68,000
Salt		Zentralbureu des Vereins der Schweizerischen Rheinsalinen (Government, 100%)	Saline at Schweizerhalle	350
Do.		La Societe des Mines (Canton of Vaud, 100%)	Saline at Bex	50
Steel		Stahl Gerlafingen AG (Swiss Steel AG, 100%)	Plant at Gerlafingen	650
Do.		Von Moss Stahl AG (Swiss Steel AG, 100%)	Plant at Emmenbrucke	300